

STUDIES IN FLORIDA BOTANY

9. The Cranichoid Orchids of Florida

- Alex D. Hawkes -

The relatively large and extensively distributed subtribe Cranichidinae of the Orchidaceae has three genera represented in the Flora of Florida. One of these, Ponthieva R.Br., may be classified as frequent to common and widely disseminated within our area, while the other two groups, Cranichis Sw. and Prescottia Idl., are excessively rare and highly restricted in their Floridian occurrence. These are all fairly small terrestrial orchids with comparatively insignificant flowers of great complexity and extreme interest to the student.

Key to the Florida Cranichoid Genera

- I. Flowers on widely-spreading pedicels.....Ponthieva R.Br.
- II. Flowers not on widely-spreading pedicels.
  - A. Flowers hooded.....Prescottia Idl.
  - A. Flowers not hooded.....Cranichis Sw.

CRANICHIS Swartz Prodr. Veg. Ind. Occ. (1788) 8.

1. Cranichis muscosa Sw., l.c., 120.

Roots subterranean, clustered, thick, rough. Stem to 4 dm high, generally less. Leaves to 8 cm long, 4 cm wide, with a petiole up to 8 cm long, elliptic to ovate or oval, acute or obtuse, gradually extending up the stem and becoming bracteose. Bracts several, variable in size, enlarging toward base. Scape thin, erect, rather rigid. Raceme small, several- to many-flowered. Flowers snow-white, about 7 mm long, non-resupinate, with the lip uppermost. Dorsal sepal usually elliptic-lanceolate, cucullate, obtuse or acutish, to 3 mm long and 1.3 mm broad, uninnervose. Lateral sepals 2-nerved, about as long as dorsal, slightly broader, acutish or obtuse, oblique, more or less ovate-lanceolate. Petals about 3 mm long, 0.5 mm wide, linear to linear-lanceolate, obtuse. Lip simple, white marked with bright green on disc, cucullate, obtuse or acute, roundish, elliptical-oval or oblong-oval, 2.5-3 mm long and 2 mm broad. Column about 1.5 mm long, enlarged apically, 4-winged near concave anther area. Capsule ellipsoidal or oblong, to 8.5 mm long, 4 mm broad, with 6 small keels.

Rarely found in extreme southern peninsular Florida, mostly in potholes in the hammocks, or in decaying stumps and cypress knees in swamps. Also in the West Indies, Mexico, Central America, and northern South America. Flowers mostly in winter and early spring.

PONTHIEVA R. Brown in Ait., Hort. Kew., ed. 2, 5 (1813) 200.

2. Ponthieva racemosa (Walt.) Mohr in Contrib. U.S. Nat. Herb. 6 (1901) 460.

Arethusa racemosa Walt. Fl. Carol. (1788) 222.

Neottia glandulosa Sims in Bot. Mag. (1805) t. 842.

Ponthieva glandulosa R.Br. in Ait., Hort. Kew., ed. 2, 5  
(1813) 200.

Ponthieva Brittonae Ames in Torreya 10 (1910) 90.

Leaves in a rosette, several, prostrate on ground or borne slightly above it, 5-8 cm long, rich lustrous green, covered with silvery pubescence, ovate, obtuse or acute, narrowing basally to a broad petiole. Spike 25-40 cm high, erect, bearing a rather lax raceme 10-20 cm long. Flowers 6-18, on ascending pedicellate ovaries 1 cm long, pure white or white striped and veined with bright emerald green and suffused with greenish and red, about 1 cm across, somewhat triangular in shape, non-resupinate, with the lip uppermost. Sepals prominently pubescent, white with three green stripes and tinged with greenish and reddish, 6-7 mm long, 2-2.5 mm broad, the laterals slightly wider than the dorsal, which is comate at the tip with the petals, ovate to oblong-lanceolate, obtuse, concave, the laterals somewhat falcate. Petals white, veined with green or yellowish-green, 4-6 mm long, 2-3.5 mm broad, dilated apically, semi-cordate or hastate, curved inward, with the adjacent edges contiguous, and the claw attached to the column about 1 mm above the base. Lip white, with palmate, raised, bright green veins, borne almost half-way up column on a clawed base, 4-6 mm long, 4-5 mm broad, the sides upcurved and wing-like, folded to sides of column. Column arcuate, about 4.5 mm long, slightly winged. Spur at base of lip, sharp, curved.

Very rare in southern peninsular Florida, frequent to common in central and northern areas, in moist hammocks and shady woods. Also from Virginia to the West Indies, Mexico, Central America, and in South America to Ecuador. Flowers in the fall and winter.

PRESCOTTIA Lindley in Hook., Exot. Fl. 2 (1825) 115.

3. Prescottia oligantha (Sw.) Ldl. Gen. & Sp. Orch. Pl. (1840)  
454.

Cranichis oligantha Sw. Prodr. Veg. Ind. Occ. (1788) 120.

Prescottia myosurus Rchb.f. ex Griseb., Fl. Br. W. Indies  
(1864) 640.

Roots thick, clustered, about 1 dm long. Leaves in a basal rosette, flaccid, several, oval to elliptic, acute or obtuse, gradually narrowing to sheathing petioles 3.5 cm long, lamina about 8 cm long, 3 cm wide. Spike erect, to 40 cm high, almost entirely clothed by sheathing tubular bracts about 3 cm long, which are oblong, and more or less acuminate, extending into the raceme. Raceme 5-7 cm long, dense, many-flowered. Flowers white, pink, or greenish, less than 4 mm in diameter, numerous, not opening fully. Sepals adnate basally to form a tiny cup, to which the other segments are joined, ovoid, obtuse, about 1.3 mm long, 1 mm wide, prominently uninervose. Petals attached to sepaline cup above the insertion of dorsal sepal, thin in texture, linear-spatulate to more or less obovate, obtuse, uninervose, 1 mm or less long, about 0.5 mm broad. Lip concave, trinervose, with the claw adnate to the sepaline cup, and with the

apical edges incurved rather sharply, 1.2 mm long, with a pair of basal auricles about 0.2 mm long which enclose the column partially. Column also attached to sepaline cup, very short, with wide wings apically. Capsule erect, ellipsoidal, about 4 mm long, 2.5 mm thick, with six more or less prominent keels.

Found in 1905 in a hammock formation in southern Florida; apparently not rediscovered here since that time. Also in the West Indies from the Bahamas south, and in Central America. Flowers in the winter.

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STUDIES IN FLORIDA BOTANY

10. The Saprophytic Orchids of Florida

- Alex D. Hawkes -

The Orchidaceae of Florida are conveniently grouped in three sections as regards habit-- epiphytes, terrestrials, and saprophytes. Perhaps the least known of the trio are the last-named species, the saprophytes. They number two in the Florida flora, both members of the subtribe *Corallorrhizinae*. A third genus of this aggregation, *Tipularia* Nutt., also occurs within our area, but will not be treated further here.

The saprophytic genera growing in Florida, *Corallorrhiza* R. Br. and *Hexalectris* Raf., are both monotypic in this state, and rather infrequent in their occurrence. They are rather showy plants, aphyllous and fleshy, and customarily are found under shrubs or trees in shaded woodlands or hammock formations, often in somewhat extensive colonies.

Key to the Florida Saprophytic Genera

- I. Pollinia 4.....*Corallorrhiza* R.Br.  
II. Pollinia 8.....*Hexalectris* Raf.

CORALLORRHIZA R. Brown in Ait., Hort. Kew., ed. 2, 5 (1813) 209.

1. *Corallorrhiza wisteriana* Conrad in Journ. Phil. Acad. Nat. Sci. 6 (1829) 145.

*Corallorrhiza odontorrhiza* Chapman Fl. South. U.S., ed. 2 (1884) 454, non Nutt.

Rhizome subterranean, branched, rough, creeping. Stem annual, thickened basally, covered by several rather loose, scarious sheaths about 5-9 cm long, dirty yellow or dull purple in color, to 40 cm high, generally somewhat less. Raceme terminal, 5-20, about 5 mm across, not opening fully, usually greenish spotted with red or maroon with a white lip that is typically blotched with purple. Sepals linear-lanceolate, fleshy, about 7 mm long, 1 mm wide. Petals slightly shorter, often wider, acutish, oblong, prominently trinervose. Lip 7 mm long, usually about 6.5 mm wide, suborbicular, undulate or crisped marginally, with a pair of slender calli near base. Column rather flattened, about 4 mm long, bearing four pollinia in an opercular, 4-celled anther. Capsule about 11 mm long.